

U.S. Application Serial No. 10/507,040
Atty. Docket No. 10191/3441
Reply to Office Action of July 28, 2009

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF THE CLAIMS:

1-9. (Canceled).

10. (Previously Presented) A method for tracking at least one object in a scene, comprising:
detecting, by means of an image detector, a sequence of images of the scene;
determining a movement of at least one object in the scene based on the sequence of images;
starting a counter when the movement of the at least one object comes to a standstill;
enabling counting of the counter only if the at least one object continues to be in the standstill;
generating a signal when a counter value of the counter reaches a predetermined threshold value;

recording the movement of the at least one object as entries in a list, and when the list is full, re-initializing the list while carrying over at least one entry from the list; and
when a most recent entry of the list corresponds to the standstill and the list is full, re-initializing the list while carrying over a most recent entry that corresponds to the movement of the at least one object in addition to carrying over the most recent entry corresponding to the standstill.

11. (Previously Presented) The method as recited in claim 10, wherein the signal triggers at least one of an audio alarm and visual alarm.

12. (Previously Presented) The method as recited in claim 10, further comprising:
generating the list to describe the movement of the at least one object with respect to the direction of movement and the time.

13. (Previously Presented) The method as recited in claim 12, further comprising:
detecting a new movement of the at least one object after coming to the standstill; and
responsive to the detecting of the new movement, re-initializing the list.

14. (Previously Presented) The method as recited in claim 12, further comprising:
generating a reference image, wherein the reference image is used to identify the at least one object in the scene.
15. (Previously Presented) The method as recited in claim 14, wherein, after identifying the position of the at least one object, the reference image is adapted onto remaining areas of the scene from at least one preceding image.
16. (Previously Presented) The method as recited in claim 14, further comprising:
selecting a length of a time interval between the sequence of images, the length being sufficiently long enough to capture a meaningful amount of object movement between images.
17. (Previously Presented) A video monitoring system for tracking at least one object in a scene, comprising:
 - at least one image detector for detecting a sequence of images of the scene;
 - a processor connected to the image detector for determining a movement of at least one object in the scene based on the sequence of images, wherein the processor starts a time count when the movement of the at least one object comes to a standstill, the time count continuing only if the object continues to be in the standstill;
 - a memory to store the determined movement of the at least one object as entries in a list; and
 - an output arrangement connected to the processor for generating a signal when the time count value reaches a predetermined threshold value;
 - wherein when the list is full, the processor re-initializes the list while carrying over at least one entry from the list, and when a most recent entry of the list corresponds to the standstill and the list is full, the processor re-initializes the list while carrying over a most recent entry that corresponds to the movement of the at least one object in addition to carrying over the most recent entry corresponding to the standstill.
18. (Previously Presented) The system as recited in claim 17, wherein the processor generates the list to describe the movement of the at least one object with respect to the direction of movement and the time.

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19. (Previously Presented) The system as recited in claim 18, wherein the processor is configured to:

determine a new movement of the at least one object after coming to the standstill;
and

responsive to the determining of the new movement, re-initialize the list.

20. (Previously Presented) The system as recited in claim 18, wherein a reference image is generated, the reference image being used to identify the at least one object in the scene.

21. (Previously Presented) The method of claim 10, wherein the most recent entry corresponding to the movement of the at least one object and the most recent entry corresponding to the standstill are carried over as respective first and second consecutive entries of the reinitialized list.

22. (Previously Presented) The method of claim 21, further comprising:

assigning a time to each of the carried over entries, wherein a difference in time between the carried over entries is the same as a difference in time between the entries prior to being carried over.

23. (Previously Presented) The system as recited in claim 17, wherein the processor is configured to carry over the most recent entry corresponding to the movement of the at least one object and the most recent entry corresponding to the standstill as respective first and second consecutive entries of the reinitialized list.

24. (Previously Presented) The system as recited in claim 23, wherein a time is assigned to each of the carried over entries, a difference in time between the carried over entries being the same as a difference in time between the entries prior to being carried over.

25. (Currently Amended) A method for tracking at least one object in a scene, the method comprising:

tracking the at least one object in the scene by an image generator, the image generator generating a sequence of images of the scene;

attributing a movement to the at least one object as a function of sequential ones of the images;

starting a counter when it is detected that a previously moving object is at a standstill;

generating a signaling as a function of a reading of the counter; and
providing a respective list that describes a movement of the at least one object with respect to motion vectors and time, the list including an entry indicative of when the at least one object is at the standstill.

26. (New) The method as recited in claim 10, further comprising:

generating the list to describe the movement of the at least one object with respect to the direction of movement and the time;

detecting a new movement of the at least one object after coming to the standstill;
responsive to the detecting of the new movement, re-initializing the list;

generating a reference image, wherein the reference image is used to identify the at least one object in the scene; and

selecting a length of a time interval between the sequence of images, the length being sufficiently long enough to capture a meaningful amount of object movement between images.

wherein the signal triggers at least one of an audio alarm and visual alarm, and

wherein, after identifying the position of the at least one object, the reference image is adapted onto remaining areas of the scene from at least one preceding image.